## 2011-02-07 Monday Morning Notes

Monday, February 07, 2011 9:14 AM

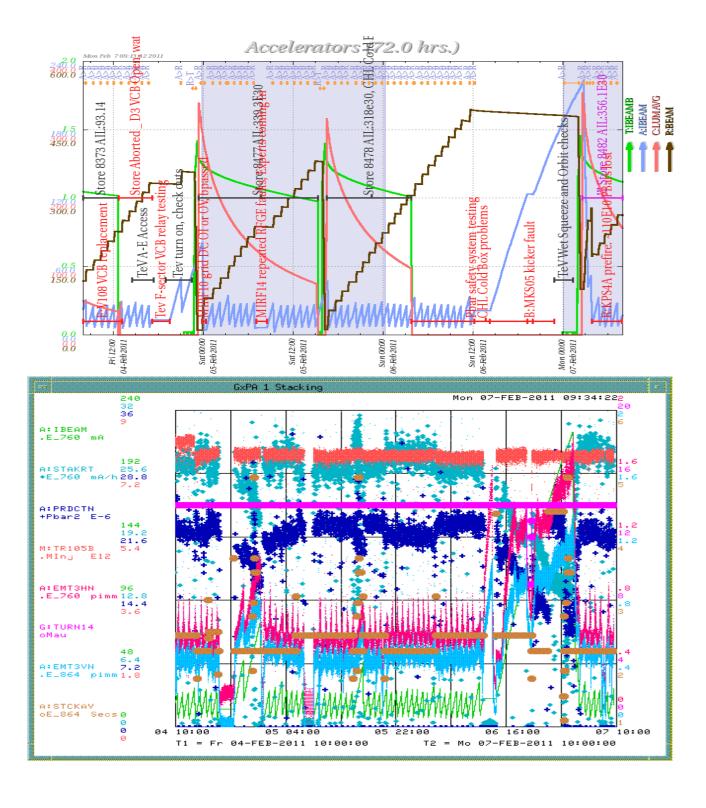
## **Stacking and Transfers**

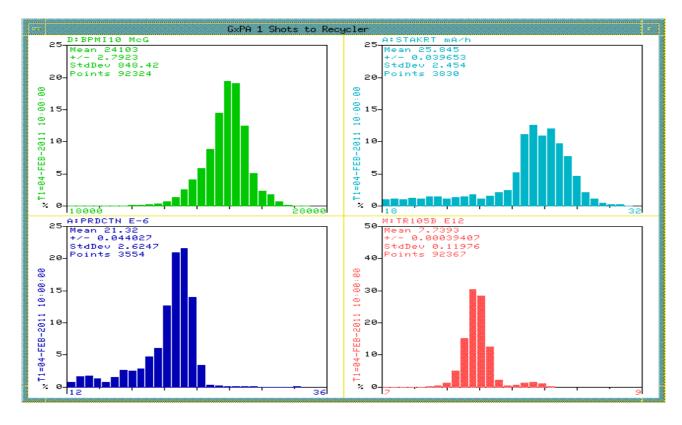
- Stacked 25.8mA/hr with a production of 21.32 pbars/Mp with 7.74 Tp on target.
- Unstacked 1522E10 (507E10/day) in 171 transfers (57/day) in 54 sets (18/day) with an overall average efficiency of 87.2%
  - o Transfer 23188 was from a 223E10 stack

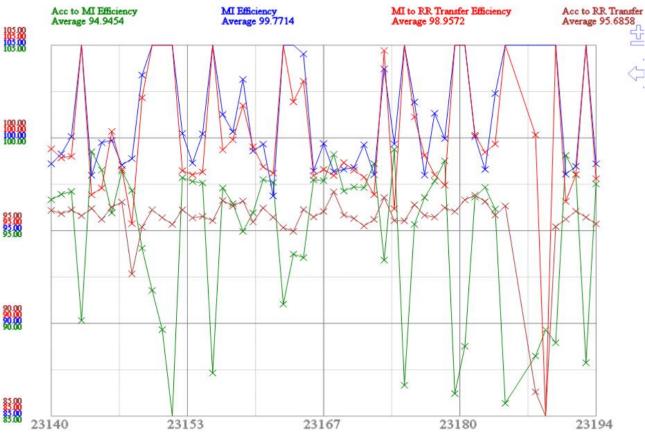
## **Numbers**

- Stacking
  - Pbars stacked: 1514.93 E10Time stacking: 64.96 Hr
  - o Average stacking rate: 23.32 E10/Hr
- Uptime
  - o Number of pulses while in stacking mode: 97565
  - Number of pulses with beam: 93090Fraction of up pulses was: 95.41%
- The uptime's effect on the stacking numbers
  - Corrected time stacking: 61.98 Hr
  - Possible average stacking rate: 24.44 E10/Hr
  - Could have stacked: 1587.76 E10/Hr
- Recycler Transfers
  - o Pbars sent to the Recycler: 1499.90 E10
  - Number of transfers: 168Number of transfer sets: 54
  - o Average Number of transfer per set: 3.11
  - o Time taken to shoot including reverse proton tuneup: 00.59 Hr
  - o Transfer efficiency: 100.05%
- Other Info
  - o Average POT: 7.74 E12
  - Average production: 21.03 pbars/E6 protons

**Plots** 







Column 1 Number _0_Pbar Transfe r Shot #	Column 4 Number_3_Transfer Tii	Column 21 Number _20_A:I BEAMB sampled on \$91 (A:BEA M7), E10	Column 22 Number _21_A:I BEAMB sampled on \$94 (A:BEA M9), E10	Unstacked (mA)	(R:BEA	Column 24 Number _23_R: BEAM (R:BEA ME0[1]) post zfer, E10	Stashed	Acc to RR Eff	Acc to MI Eff	Acc to MI2 Eff	Acc to MI * Acc to MI2 Efficiency	Tran sfers	Sets	Column 5 Number_ 4_Acc Horizont al Emittanc	Column 6 Number _5_Acc Yertical Emittan ce	Column 8 Number _7_Acc Longitu dinal Emittan ce	
	Totals =>		EIU	EIU	1522.00			1326.58	87.16%	93.67%	96.40%	90.30%	171	54	5.742	4.3077	1,9394
	Daily Average =>				507.33			442.19					57	18			
23194	Monday, February 07, 2011	8:32	26.10	6.81	22.02	262.49	283.24	21.06	95.61%	97.48%	96.62%	94.19%	3		6.074	4.599	1.965
23193	Monday, February 07, 2011	7:15	28.11	7.56		241.28	263.22	22.31	95.78%	85.04%	94.67%	80.51%	3	1	5.954	4.416	1.957
23192	Monday, February 07, 2011	6:23	26.41	7.05	22.18	220.75	241.70	21.30	96.05%	97.55%	96.70%	94.33%	3	1	5.779	4.349	1.951
23191	Monday, February 07, 2011	5:33	26.09	7.02	21.86	200.65	221.18	20.90		98.37%	97.09%	95.51%	3	-	5.883	4.149	1.953
23190	Monday, February 07, 2011	4:48	32.82	8.39	27.22	176.19	201.59	25.89	95.10%	92.22%	96.82%	89.29%	3	1	6.195 6.936	4.61	1.926
23189 23188	Monday, February 07, 2011 Monday, February 07, 2011	3:46 2:50	52.13 223.28	10.54 41.70	46.70 189.72	249.58 100.27	178.60 252.32	-67.28 163.40	-144.07% 86.12%	85.35% 88.43%	96.86% 93.01%	82.67% 82.25%	4	1		9.646	1.908
23185	Sunday, February 06, 2011	11:34	33.73	8.39	28.02	468.18	494.22	26.92	96.08%	80.30%	97.00%	77.89%	3	1		4,603	1.916
23184	Sunday, February 06, 2011	10:24	25.23	6.46		451.22	471.27	20.61	95.91%	96.38%	97.44%	93.91%	3	1	_	4.176	1.965
23183	Sunday, February 06, 2011	9:34	25.50	6.48	21.68	432.72	453.01	20.93	96.53%	97.58%	96.29%	93.96%	3	1	5.579	4.323	1.955
23182	Sunday, February 06, 2011	8:43	26.83	6.29	23.22	412.35	434.31	22.51	96.91%	97.44%	97.71%	95.21%	3	1	5.661	4.257	1.942
23181	Sunday, February 06, 2011	7:50	26.86	6.80	22.80	392.21	413.66	21.97	96.37%	92,39%	96.58%	89.23%	3	_		4.447	1.965
23180	Sunday, February 06, 2011	6:56	27.43	6.95	23.17	371.42	393.35	22.27	96.10%	90.34% 98.72%	96.63%	87.30%	3	_		4.292 3.995	1.959 1.954
23179 23178	Sunday, February 06, 2011 Sunday, February 06, 2011	6:00 5:10	25.36 27.94	7.15	21.71	351.93 330.62	372.52 352.85	20.88	96.18% 95.87%	97.78%	99.23% 98.71%	97.96% 96.52%	3		_	4.129	1.969
23177	Sunday, February 06, 2011	4:15	32.64	7.62	27.65	305.45	331.46	26.52	95,90%	97.58%	95,35%	93.04%	3	_		4.003	1.913
23176		3:09	25.72	6.90	21.59	285.90	306.35	20.78	96.28%	95.45%	96.81%	92.40%	3	1	5.568	4.046	1.996
23175	Sunday, February 06, 2011	2:21	26.35	6.94	22.20	265.57	286.55	21.25	95.69%	91.29%	97.00%	88.55%	3	1	5.72	4.177	1.981
23174	Sunday, February 06, 2011	1:32	27.04	6.93	22.82	244.44	266.06	21.88	95.85%	98.93%	98.44%	97.38%	3	_	5.696	4.078	1.962
23173	Sunday, February 06, 2011	0:41	27.35	7.35	22.75	223.36	245.00	21.99	96.68%	95.83%	96.86%	92.82%	3			4.319	1.987
23172	Saturday, February 05, 2011	23:51	28.91	7.58	24.07	201.08	223.79	23.02	95.63%	98.82%	97.43%	96.28%	3			4.249	1.973
23171 23170	Saturday, February 05, 2011 Saturday, February 05, 2011	22:57	26.74 27.33	7.36 7.29	22.21 22.74	180.44 159.11	201.38 180.66	21.15	95.23% 95.65%	97.55% 97.25%	97.02% 95.80%	94.65% 93.17%	3	_		4.378 4.272	1.985
23169	Saturday, February 05, 2011	21:16	26.34	7.25	21.81	138.62	159.36	20.92	95.94%	97.31%	96.02%	93.44%	3	_		4.178	1.974
23168	Saturday, February 05, 2011	20:24	28.11	5.91	24.07	115.82	138.91	23.32	96.87%	98.85%	97.16%	96.05%	3	_	_	3.727	1.925
23167	Saturday, February 05, 2011	19:21	25.82	6.81	21.75	95.57	116.16	20.87	95.94%	97.66%	97.56%	95.27%	3	1	5.299	4.055	1.979
23166	Saturday, February 05, 2011	18:28	25.63	6.69	21.63	75.19	95.74	20.70	95.71%	97.39%	96.59%	94.06%	3			3.99	1.97
23165	" ' '	17:37	26.75		22.71	53.67	75.32	21.83	96.11%	94.39%	97.48%	92.00%	3	_		4.131	1.983
23164	Saturday, February 05, 2011	16:38	47.57	6.18	44.92	11.92	53.93	42.57	94.76%	93.00%	97.47%	90.65%	4	1		4.113	1.884
23163		14:52	27.02	6.84	22.93	360.14	381.58	21.84		91.42%	96.62%	88.33%	. 3	-	+	4.041	1.962
23162	" ' '	13:57	25.69	_		_	_	_		97.469		92.079	6	-	1 5.217	_	
23161	" ' '	13:04 12:09	_	_		_	_	_				94.659 92.159	6	_	1 5.487 1 5.468	_	
23159		11:16					_	_					_	_	1 5.460	_	
23158	" '		_	_		_	_	_			_		_	_	1 5.279	_	_
23157	" ' '	9:22	_	_		_	_	_			_	_	_	_	1 3.862	+	_
23156		6:49	_	_		_	_	_			96.769	6 84.779	6	_	1 5.269	_	_
23155		5:52	_	_		_	_	_			_	95.859	6	_	1 5.504	_	_
23154		5:01	_	_		_	_	_			_	94.989	6	_	1 5.593	4.345	_
23153	Saturday, February 05, 2011	4:08	27.12	6.76	22.78	150.95	172.63	21.90	96.129	97.999	97.499	95.539	6	3	1 5.494	4.17	1.953
23152	Saturday, February 05, 2011	3:22	34.46	9.01	28.15	124.76	151.32	26.78	95.129	71.969	96.439	69.399	6	3	1 5.836	4.69	1.956
23151	Saturday, February 05, 2011	2:19	28.53	7.32	23.97	102.32	125.07	22.99	95,749	85,949	97.339	83.649	6	3	1 5.524	4.24	1.967
23150	Saturday, February 05, 2011	1:18	27.47	6.74	23.27	80.40	102.52	22.34	96.029	92.139	97.499	6 89.819	6	3	1 5.856	4.8	1.965
23149		23:55	80.47	4.10	76.35	10.36	_	_		96.259	_	92.869	_	_	1 5.321	3.41	1.743
23148		21:09	_	_		_	_	_		97.099		93.019	_	_	7.562	5.97	1.831
23147		16:44	_	_		_	_	_				94.489	_	_	1 5.449	_	_
23146		15:50	_	_		_	_	_				91.759	_	_	1 5.386	_	_
23145		15:00	_	_		_	_	_			_	96.169	6	_	1 5.53	_	_
23144		14:05 13:08	_	_		_	_	_	_			6 95.989 6 82.219	6		1 5.592 1 5.368	_	_
23143		_	_	_		_	_	_			_	6 95.069	_	_	_	_	_
23142		12:06 11:13	_	_		_	_	_			_	6 93.729	6	_	1 5.179 1 5.443	_	_
23141	" ' '	10:20	_	_		_	_	_				92.709	6	_	1 5.67	_	_
23139		9:22	_	_		_	_	_					_	_	1 5.527	_	_